

PROPOSED USE OF THE PLENARY POWERS TO ENSURE THAT  
THE SPECIFIC NAME "MISSISSIPIENSIS" DAUDIN, [1801-1802] AS  
PUBLISHED IN THE COMBINATION "CROCODILUS MISSISSIPI-  
ENSIS" SHALL BE THE OLDEST AVAILABLE NAME FOR THE  
NORTH AMERICAN ALLIGATOR (CLASS REPTILIA) (SUPPLEMENT  
TO, AND, IN PART, CORRECTION OF, A RULING GIVEN IN  
"OPINION" 92)

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(Commission Reference : Z.N.(S.) 551)

### Historical Background

The purpose of the present application is to seek the approval of the International Commission on Zoological Nomenclature for the correction in certain particulars of the entry relating to the generic name *Alligator* Cuvier, 1807 (Class Reptilia) made on the *Official List of Generic Names in Zoology* by a Ruling given in *Opinion* 92 (1926, *Smithson. misc. Coll.* 73 (No. 4) : 3-4). The need for action in this matter has been brought to light in the course of the examination, in preparation for the forthcoming publication of the *Official List* for publication in book-form, of the entries made thereon in the period up to the end of 1936. This examination brought to light also the need for the use by the Commission of its Plenary Powers in one respect if the position of the name *mississipiensis* Daudin for the North American Alligator is to be fully assured. The points at issue are set out in the following paragraphs.

2. The generic name *Alligator* Cuvier (G.L.C.F.D.), (1807 (*Ann. Mus. Hist. nat.*, Paris 10 : 25) was published as the name for a subgenus of the genus *Crocodilus*. Cuvier placed in this subgenus four nominal species, of which the first was *Crocodilus (Alligator) lucius* (: 64), a new nominal species described from "America septentrionalis". Cuvier did not designate or indicate a type species for his subgenus *Alligator*. The first type selection for this genus was made by Stejneger (L.) & Barbour (T.) in 1917 (*Check List N. Amer. Amphib. Rept.* (ed. 1) : 41), who so selected the nominal species *Crocodilus (Alligator) lucius* Cuvier. This type selection is currently accepted by all specialists in this group (see paragraph 5 below).

3. When in 1926 the name *Alligator* Cuvier was placed on the *Official List* (loc. cit. : 3), the type species was given as "*Crocodilus mississippiensis* Daudin, 1803". This entry was incorrect, for the nominal species so named by Daudin was not among the nominal species cited by Cuvier when establishing the nominal taxon *Alligator*. The date "1803" given for the name *mississippiensis* Daudin in *Opinion* 92 is also incorrect, for the volume in which this name appeared is dated "An X" of the French Revolutionary Calendar, i.e. the twelve-month period September 1801 to September 1802. The correct reference for this name is *Crocodilus mississippiensis* Daudin, [1801-1802], *Hist. nat. gén. partic. Rept. 2* : 412, nota (1).

4. The subsequent investigation undertaken in the Office of the Commission brought to light two problems affecting the entries to be made on the *Official Lists* and *Official Indexes* in this case which raised also taxonomic issues on which it was apparent that it would be necessary to obtain the views of representative specialists before proposals could be formulated for the consideration of the International Commission. These issues were :—

- (a) Is the name *Lacerta alligator* Blumenbach, 1779, an actual or potential senior subjective synonym of *Crocodilus mississippiensis* Daudin, [1801-1802] ?
- (b) Is it agreed that the nominal species *Crocodilus* (*Alligator*) *lucius* Cuvier, 1807, and *Crocodilus mississippiensis* Daudin, [1801-1802], represent the same taxonomic unit ?

5. In order to obtain the necessary taxonomic advice on which to base a proposal for the consideration of the International Commission a questionnaire asking for views on the foregoing questions was issued by the Office of the Commission on 7th February 1956 to a number of specialists who, it was thought, would be interested in the issues involved and would be in a position to furnish advice on the action which it was desirable should be taken by the Commission. In the same questionnaire was included a request for information on the question whether the type selection for *Alligator* Cuvier made by Stejneger & Barbour in 1917 was the earliest such selection made for this nominal species. All the specialists who dealt with this point in their replies stated that, so far as they were aware, the above was the first type selection made for this genus. That type selection has accordingly been accepted in the present paper (paragraph 2 above). The specialists consulted on the foregoing matters were either known to be specialists in the group concerned or by reason of working at National Natural History Museums were in a position to obtain and furnish to this Office the views of representative specialists in their respective countries.

6. The specialists who have been so good as to assist the International Commission with advice in the present case are the following :—

J. Guibé (*Muséum National d'Histoire Naturelle, Paris*)

E. M. Hering (*Humboldt-Universität zu Berlin, Zoologisches Museum, Berlin*)

Tadeusz Jaczewski (*The Polish Academy of Sciences, Institute of Zoology, Warsaw*)

Arthur Loveridge (*Museum of Comparative Zoology at Harvard College, Massachusetts, U.S.A.*)

Robert Mertens (*Forschungs-Institut u. Natur-Museum Senckenberg, Frankfurt a.M.*)

A. I. Ortenburger (*University of Oklahoma, Norman, Oklahoma, U.S.A.*)

H. W. Parker (*British Museum (Natural History), London*)

Jay M. Savage (*University of South California, Los Angeles, California, U.S.A.*)

Karl P. Schmidt (*Chicago Natural History Museum, Chicago, Illinois, U.S.A.*)

Hobart M. Smith (*University of Illinois, Urbana, Illinois, U.S.A.*)

Malcolm Smith (*British Museum (Natural History), London*)

Heinz Wermuth (*Zoologisches Museum, Berlin*)

**Question of the possible suppression under the Plenary Powers  
of the specific name "alligator" Blumenbach, 1779, as published  
in the combination "Lacerta alligator"**

7. The first of the matters put to the consultant specialists was whether having regard to the early date of the binomen *Lacerta alligator* Blumenbach (J.F.), 1779, *Handb. Naturgesch.* (1) : 263) and the fact that it was commonly treated as representing in part the same species as that which later was named *Crocodylus mississippiensis* by Daudin, it was "considered that the interests of stability in nomenclature would be promoted if the Commission were to suppress the above name [*alligator* Blumenbach] under its Plenary Powers". The following is the portion of the paper submitted to specialists in explanation of the grounds on which the above question was submitted :—

The nominal species *Crocodylus lucius* Cuvier, 1807, has been identified in later literature with *Crocodylus mississippiensis* Daudin [1801-1802]. Both species have been identified also as being "in part" the same as *Lacerta alligator* Blumenbach, 1779, e.g. by Stejneger (1917). If, as appears to be the case, Blumenbach's species *alligator* is considered by specialists to be a composite species which included amongst others the North American Alligator,

that name will, by reason of its early date, be a constant menace to nomenclatorial stability, for at any moment some specialist by invoking the provisions of Article 31, might seek to fix Blumenbach's name *alligator* to one of the component species. From the point of view of promoting nomenclatorial stability there seems therefore to be a strong case for asking the Commission to use its Plenary Powers to suppress the specific name *alligator* Blumenbach, 1779. The situation is further aggravated by the fact that some authors (e.g. Mook (C.C.) & Mook (G.E.), 1940 : 5) have taken the view that *alligator* Blumenbach is virtually unidentifiable, the description being so poor. Mook's discussion of Blumenbach's name *alligator* is included in his paper in the Section headed "The North American Crocodile" and it is to be inferred therefore that his view was that, if the name *alligator* Blumenbach could be interpreted at all, it applied to the above species and not to the Alligator of the Mississippi. It seems therefore that the continued availability for nomenclatorial purposes of the specific name *alligator* Blumenbach, 1779, not only serves no useful purpose but actually constitutes a serious potential threat to nomenclatorial stability. It is therefore suggested for consideration that the best course would be for the Commission, when dealing with the problem of the generic name *Alligator* Cuvier, 1807, to use its Plenary Powers to suppress the dangerous *nomen dubium* the specific name *alligator* Blumenbach, 1779, as published in the combination *Lacerta alligator*.

8. The advice received from specialists has proved to be overwhelmingly in favour of the suppression of the specific name *alligator* Blumenbach, 1779. Ten (10) out of the twelve (12) specialists consulted advise this course (Guibé ; Hering ; Jaczewski ; Loveridge ; Mertens ; Ortenburger ; Savage ; Schmidt ; Smith (H.M.) ; Wermuth). Of the remainder one (Malcolm Smith) considered that the name *alligator* Blumenbach is a *nomen dubium* and cannot be used, while the other (Parker) is opposed to the use of the Plenary Powers in a case such as the present. The replies received on this question are given in Annexe I to the present paper. In view of the advice received a proposal for the suppression of the specific name *alligator* Blumenbach under the Plenary Powers is included in the present paper.

**Interpretation of the nominal species "*Crocodilus (Alligator) lucius*"  
Cuvier, 1807, and "*Crocodilus mississippiensis*" Daudin [1801-1802]**

9. The question put to the consultant specialists under Heading (c)—the question under Heading (b) related to the question of the place where a type species for *Alligator* Cuvier was first validly selected (as to which reference should be made to paragraph 5 above)—was as follows :—"Is the identification of the nominal species *Crocodilus lucius* Cuvier, 1807, and of *Crocodilus mississippiensis* Daudin [1801-1802] based upon firm foundations or are there difficulties in this matter which have been glossed over?" The following is the portion

of the paper submitted to specialists in explanation of the grounds on which the above question was submitted :—

The next question on which it is desired to obtain the advice of specialists is whether the original descriptions (a) of *Crocodilus lucius* Cuvier, 1807, and (b) of *Crocodilus mississippiensis* Daudin, [1801–1802] clearly apply to one species only, that species being unquestionably the North American species to which the name *mississippiensis* Daudin is commonly applied. It is judged necessary to raise this question owing to the fact that among the documents of the Commission relating to this case there are a number of obscure observations which appear to imply that the current identification of one or other of the above nominal species rests upon insecure foundations or is even known to be incorrect. This is a matter which the Commission will need to satisfy itself about before it commits itself to the publication of the *Official List* in book-form, for it is anxious above all things to secure that, when that volume is published, it shall not be marred by avoidable errors. Moreover, with the help of its Plenary Powers the Commission is in a position to overcome any difficulties which may at present be resting hidden in this matter by providing a solution in harmony with current nomenclatorial usage.

10. Of the twelve specialists who returned answers to the question quoted at the beginning of paragraph 9 above nine (9) replied that there was no doubt that the nominal species *Crocodilus (Alligator) lucius* Cuvier and *Crocodilus mississippiensis* Daudin represented the same taxonomic species. The specialists so advising were :—Guibé ; Hering ; Mertens ; Ortenburger ; Parker ; Savage ; Schmidt ; Smith (M.) ; Wermuth. The remaining three (3) specialists (Jaczewski ; Loveridge ; Smith (H.M.)) replied that they were not in a position to give a definite reply, but one (1) (Smith (H.M.)) pointed out that the two nominal taxa concerned had been treated as representing the same taxonomic unit for at least the last seventy-five years. The replies received on this question are given in Annexe 2 to the present paper.

11. The replies to this part of the questionnaire elicited one very important piece of information which had not previously been brought to the attention of the International Commission, namely, that the nominal species *Crocodilus (Alligator) lucius* Cuvier, 1807, and *Crocodilus mississippiensis* Daudin, [1801–1802], were based in part upon the same material and therefore that, if the specimen which was a syntype of both of these nominal species were to be selected as the lectotype of each of these nominal species, the names *lucius* Cuvier and *mississippiensis* Daudin would become objective synonyms, and not merely subjective synonyms, of one another. This question was raised by four (4) of consultant specialists, namely :—Guibé ; Mertens ; Parker ; Savage. It was evident that a solution of this problem on the foregoing lines offered great advantages from the point of view of promoting nomenclatorial stability. As the result of further consultations Professor Mertens agreed to furnish a note containing a twofold lectotype selection on the lines described above,



the note so furnished to be submitted to the Commission as part of the present application. Professor Mertens has now furnished the promised note which is attached to the present paper as Annexe 3. As the result of the lectotype selection so made by Professor Mertens, the specific name *lucius* Cuvier, 1807, becomes a junior objective synonym of *mississippiensis* Daudin, [1801-1802]. As an objectively invalid name, it should therefore be placed on the *Official Index of Rejected and Invalid Specific Names in Zoology* at the same time that the name *mississippiensis* Daudin is placed on the *Official List of Specific Names in Zoology*.

12. At this point it is necessary to call attention to the Commission's recently published *Declaration 21* (1956, *Ops. Decls. int. Comm. zool. Nomencl.* 12(11) : i-viii) which provides that, "where there are two or more identical nominal species (i.e. nominal species, the names of which are objective synonyms of one another), the designation, indication or selection of any one of those nominal species to be the type species of a genus is to be treated as the designation, indication or selection of whichever of the nominal species concerned has the oldest available name, irrespective of whether or not that nominal species was cited by the author of the name of the genus in question". In view of the action of Professor Mertens in selecting the same specimen to be the lectotype of *Crocodylus* (*Alligator*) *lucius* Cuvier, 1807, and of *Crocodylus mississippiensis* Daudin, [1801-1802], these names, as being objective synonyms of one another come within the scope of the provisions of the *Declaration* referred to above. Accordingly, the name to be cited as that of the type species of the genus *Alligator* Cuvier is *Crocodylus mississippiensis* Daudin, [1801-1802], and not *Crocodylus* (*Alligator*) *lucius* Cuvier, 1807.

Orthography of the specific name "mississippiensis" Daudin,  
[1801-1802], as published in the combination "*Crocodylus*  
*mississippiensis*"

13. It will be noted from the bibliographical reference given in paragraph 3 above that the specific name for the North American Alligator was published in Daudin's work as *mississippiensis*, i.e. with a single instead of with a double "p" at the end of the third syllable of the word. It is part of the present proposal that the International Commission should place this name on the *Official List of Specific Names in Zoology*. For this purpose it will be necessary to consider whether the above spelling is to be adopted or whether it is to be looked upon as a mis-spelling which ought to be emended to *mississippiensis*, either under the decisions taken by the Copenhagen Congress for the emendation of names (1953, *Copenhagen Decisions zool. Nomencl.* : 43-44, Decision 71) or, in default, by action by the Commission under its Plenary Powers. Clearly the first step in such a case is to examine the book in which the name was first

published in order to determine whether it contains any clear evidence that the spelling used was due to inadvertence. In the present case reference to Daudin's book discloses no such evidence. Daudin applied to this species the vernacular (French) name "Le Crocodile du Mississipi" and his description of this species contains numerous references to this river which in every case was spelled by him with a single "p". It is evident therefore that Daudin regarded this spelling as the correct spelling. Nor is it possible to argue that the name of this river is correctly spelled only with a double letter "p" and therefore that Daudin's use of a single "p", both when using it as a French word and as a Latinised word is necessarily incorrect; for reference to the Oxford English Dictionary shows that in former times the spelling with a single "p" was not uncommon and should not be called incorrect. Accordingly, the emendation of this name to a spelling with a double "p" could not reasonably be justified on the ground that this was the currently accepted spelling and that such an emendation under the Plenary Powers was desirable in order to avoid interference with established nomenclatorial practice. In the present case both the original spelling with the single "p" and the emended spelling with the double "p" have been used, but it does not appear that the emended spelling can be claimed to be in general use, for the original spelling with the single "p" has been used in the influential *Check List* of Stejneger and Barbour which has been widely followed in such matters by many authors. Unless therefore fresh evidence is elicited as the result of the publication of the present application, it appears that the spelling with the single "p" is not only the valid original spelling for this name but is also in sufficiently wide general use as to make it undesirable that this spelling should be emended to a spelling with a double "p". Subject to the foregoing reservation it is accordingly proposed that the specific name *mississippiensis* Holbrook (J.E.), 1842 (*N. Amer. Herp.* 2 : 53), as published in the combination *Alligator mississippiensis*, be rejected as an Invalid Emendation of *mississippiensis* Daudin, [1801-1802], as published in the combination *Crocodilus mississippiensis*, and that it should be thereupon placed on the *Official Index of Rejected and Invalid Specific Names in Zoology*, together with the Erroneous Subsequent Spelling *missisipensis* Gray (J.E.), 1831 (*Syn. Rept.* : 62), as published in the combination *Alligator missisipensis*.

#### Family-group-name aspect

14. The genus *Alligator* Cuvier was made the type genus of a nominal family-group taxon by J. E. Gray who in 1944 (*Cat. Tortoises Crocodiles Amphisbaenians Coll. Brit. Mus.* : 56) published the family-group name *ALLIGATORIDAE*. Under the General Directive issued to the International Commission by the International Congress of Zoology this name should now be placed on the *Official List of Family-Group Names in Zoology*.

#### Recommendations

15. In the light of the information kindly furnished by specialists which has been summarised in the present application and is given in greater detail in the attached annexes, I recommend that, in order to clear this particular

item in preparation for the publication of the *Official List* in book-form, the International Commission on Zoological Nomenclature should :—

- (1) use its Plenary Powers to suppress the under-mentioned specific name for the purposes of the Law of Priority but not for those of the Law of Homonymy: *alligator* Blumenbach, 1779, as published in the combination *Lacerta alligator* ;
- (2) rule that the spelling of the specific name *mississippiensis* Daudin, [1801–1802], as published in the combination *Crocodylus mississippiensis*, is a Valid Original Spelling ;
- (3) substitute the following emended entry on the *Official List of Generic Names in Zoology* relating to the generic name *Alligator* Cuvier, 1807 :—

427. **Alligator** Cuvier, 1807 (gender : masculine) (type species, by selection by Stejneger (L.) & Barbour (T.) (1917) and through *Declaration* 21 : **Crocodylus mississippiensis** Daudin, [1801–1802]) ;

- (4) place the under-mentioned specific name on the *Official List of Specific Names in Zoology* : *mississippiensis* Daudin, [1801–1802], as published in the combination *Crocodylus mississippiensis* (specific name of type species of *Alligator* Cuvier, 1807) ;
- (5) place the under-mentioned specific names on the *Official Index of Rejected and Invalid Specific Names in Zoology* :—
  - (a) *alligator* Blumenbach, 1779, as published in the combination *Lacerta alligator* (name proposed to be suppressed under (1) above under the Plenary Powers) ;
  - (b) *lucius* Cuvier, 1807, as published in the combination *Crocodylus (Alligator) lucius* (a junior objective synonym of *mississippiensis* Daudin, [1801–1802], as published in the combination *Crocodylus mississippiensis* through the lectotype selection made by Mertens (R.) in Annexe 3 to the present paper) ;
  - (c) *mississippiensis* Holbrook (J.E.), 1842, as published in the combination *Alligator mississippiensis* (an Invalid Emendation of *mississippiensis* Daudin, [1801–1802], as published in the combination *Crocodylus mississippiensis*) ;
  - (d) *missisipensis* Gray (J.E.), 1831, as published in the combination *Alligator missisipensis* (an Erroneous Subsequent Spelling for *mississippiensis* Daudin, [1801–1802], as published in the combination *Crocodylus mississippiensis*) ;
- (6) place the under-mentioned family-group name on the *Official List of Family-Group Names in Zoology* : ALLIGATORIDAE Gray (J.E.), 1844 (type genus : *Alligator* Cuvier, 1807).



## ANNEXE 1

Replies received from specialists on the question whether it is desirable in the interests of nomenclatorial stability that the name "alligator" Blumenbach, 1779, as published in the combination "*Lacerta alligator*", a possible senior subjective synonym of "mississippiensis" Daudin, [1801-1802], as published in the combination "*Crocodylus mississippiensis*", should be suppressed by the International Commission under its Plenary Powers

1. J. Guibé (*Paris*) (30th March 1956)

L'impossibilité d'identifier d'une façon certaine *Lacerta alligator* Blumenbach, 1779, signalée des 1801 par Cuvier (*Archiv fuer Zool. u. Zoot.* p. 169) milite en faveur de la suppression de cette appellation.

2. E. M. Hering (*Berlin*) (26th February 1956)

I transferred your letter of 31st January in the matter of *Alligator* to Dr. Heinz Wermuth, our herpetologist, and he told me that he had answered you direct. He has given me a copy of his letter. I agree with him in all the points made in his letter to you of 23rd February. [See No. 12 below.]

3. Tadeusz Jaczewski (*Warsaw*) (21st February 1956)

I am for the suppression of the specific name *alligator* Blumenbach, 1779, as published in the combination *Lacerta alligator*. The Plenary Powers of the Commission should be used in this case in the interests of stability in nomenclature.

4. Arthur Loveridge (*Cambridge, Mass.*) (10th February 1956)

In view of the menace to a stabilized nomenclature by the questionably composite species *Lacerta alligator* Blumenbach, 1779, I think this name should be suppressed by the International Commission.

5. Robert Mertens (*Frankfurt a.M.*) (27th February 1956)

Im Interesse der Stabilität der Zoologischen Nomenklatur erscheint in der Tat sehr erwünscht, den Namen *Lacerta alligator* Blumenbach, 1779, zu unterdrücken.

6. A. I. Ortenburger (*Norman, Oklahoma*) (21st February 1956)

I am advising "yes" to question (a) . . .

**7. H. W. Parker** (*London*) (10th February 1956)

The status of *Lacerta alligator* Blumenbach, 1779 does not affect the validity of *Alligator* Cuvier in any way. Whatever it may have been based on, the only possible impact on this genus would be that the name of its type species might have to be changed. I see no point in suppressing the name because of this contingency. My reasons for this standpoint are :—

- (1) To suppress a name because possibly, perhaps, sometime, it might be a nuisance is a very bad principle. It might equally well turn out that to have such an unallocated name was a blessing.
- (2) If it were so suppressed in the light of the evidence now available, might not a reversal be demanded if the evidence eventually proved to be incomplete? There were specimens associated with Blumenbach's name(s) "bei den Exemplaren beder Thiere, die im akademischen Museum . . . befindlich sind . . ." These might be found.

**8. J. M. Savage** (*Claremont, California*) (19th April 1956)

I would strongly favour suppression of the name *Lacerta alligator* Blumenbach, 1779.

**9. Karl P. Schmidt** (*Chicago, Ill.*) (17th February 1956)

It is strongly recommended that the *Lacerta alligator* of Blumenbach, 1779, be suppressed as a *nomen dubium*.

**10. Hobart M. Smith** (*Urbana, Ill.*) (23rd February 1956)

Since Blumenbach's name antedates that of both the Alligator and the Crocodile of North America, its acceptance would unquestionably upset present nomenclature, and thus its suppression is clearly in the interest of nomenclatorial stability.

**11. Malcolm Smith** (*London*) (2nd March 1956)

I regard *Lacerta alligator* Blumenbach as a *nomen dubium* and consider that it cannot be used.

**12. Heinz Wermuth** (*Berlin*) (23rd February 1956)

The name *Lacerta alligator* Blumenbach, 1779, should be suppressed as a *nomen dubium* which could endanger the usual name *Alligator mississippiensis* Daudin, [1801–1802].

## ANNEXE 2

Replies received from specialists on the question of the interpretation of the nominal species "*Crocodylus (Alligator) lucius*" Cuvier, 1807, and "*Crocodylus mississippiensis*" Daudin, [1801-1802]

1. J. Guibé (*Paris*) (30th March 1956)

Il apparait comme tout à fait certain que l'exemplaire ayant servi à la description de *C. mississippiensis* Daudin [1801-1802] avait été vu précédemment par Cuvier. Non seulement Daudin signale le fait, mais Cuvier (1801, p. 170) fait mention de ce specimen rapporté par Michaux des bords du Mississipi. Il semble que ce même exemplaire a servi à Cuvier (1807, p. 28) pour décrire son *C. lucius*. Cuvier en effet considère comme sans valeur le travail de Daudin (1807, p. 16).

2. E. M. Hering (*Berlin*) (26th February 1956)

For the reply from Dr. Hering see Annexe 1, paragraph 2.

3. Tadeusz Jaczewski (*Warsaw*) (21st February 1956)

We have no herpetologist acquainted with the taxonomy of crocodiles and I am not able to answer this question.

4. Arthur Loveridge (*Cambridge, Mass.*) (10th February 1956)

I can offer no opinion.

5. Robert Mertens (*Frankfurt a.M.*) (27th February 1956)

For Dr. Mertens's contribution see Annexe 3.

6. A. I. Ortenburger (*Norman, Oklahoma*) (21st February 1956)

I am advising "yes" to question (c) . . .

7. H. W. Parker (*London*) (10th February 1956)

The species selected as type species of the subgenus *Alligator* Cuvier, 1827, is the one described by Cuvier under the name *Crocodylus lucius*. The description accompanying this name is based on two specimens, one collected by Michaux and the other, a larger one, sent to Paris by Peale. Michaux's specimen had previously been described by Cuvier (1801, Wiedeman's *Arch. f. Zoolog. & Zootom.* 2, 2, 162-167) as probably representing a new species but was not then named. The species represented by this specimen had previously been named *Crocodylus mississippiensis* Daudin, [1801-1802]; the type (unique) specimen of this name was the same specimen, i.e. the one collected by Michaux.

So, unless it can be shown that Cuvier's *Crocodylus lucius* was a composite (i.e. that Peale's specimen belonged to a different species), the type species of *Alligator* Cuvier is the one named *Crocodylus mississippiensis* by Daudin [1801-1802].

8. J. M. Savage (Claremont, California) (19th April 1956)

The name *Crocodilus mississippiensis* Daudin, [1801-1802], is apparently based upon a single specimen of the American alligator taken by Michaux. This specimen is probably at the Paris Museum. Daudin seems to have had Cuvier's unpublished manuscript at hand when he described this form and points out on page 413 that the diagnosis of this form is from Cuvier. If Cuvier (1807) had only one specimen at hand when he described *lucius* it was most certainly the same example mentioned by Daudin. I have not seen Cuvier's 1807 paper. If more than one specimen was used by Cuvier, we could designate as lectotype the Michaux example. The Commission should check the above data against the original descriptions and, if it has not already done so, should communicate with Dr. J. Guibé at the Paris Museum regarding the Michaux alligator.

Daudin's allocation at the suggestion of Cuvier, of *Crocodilus mississippiensis* to the group containing the caimans and his description seem to clinch the matter. The Michaux specimen from "les bords du Mississipi" could only be the genus *Alligator* and not the crocodile of the southern United States, *Crocodilus acutus*. This could of course be confirmed by an examination of the Michaux specimen, if it still exists.

9. Karl P. Schmidt (Chicago, Ill.) (17th February 1956)

The identification of *Crocodilus lucius* Cuvier, 1807, with *Crocodilus mississippiensis* Daudin, [1801-1802], is unequivocal.

10. Hobart M. Smith (Urbana, Ill.) (23rd February 1956)

I cannot verify conspecificity of *C. lucius* Cuvier and *C. mississippiensis* Daudin, since I do not have the latter available, but I can point out that these have been accepted as conspecific for at least 75 years, and to construe otherwise would provide for nomenclatorial instability.

11. Malcolm Smith (London) (2nd March 1956)

*Crocodilus lucius* Cuvier and *C. mississippiensis* Daudin are based on firm foundations and are valid.

12. Heinz Wermuth (Berlin) (23rd February 1956)

The species *Crocodilus lucius*, described by Cuvier, 1807, with a clear North American type locality and as a member of the simultaneously erected group *Alligator*, cannot be any other crocodile than *Alligator mississippiensis* (Daudin), which exists as the only species of the family ALLIGATORIDAE in North America. By this reason the identity of *Crocodilus lucius* Cuvier and *Alligator mississippiensis* seems clear to me. Merely a future discovery of a second species of the ALLIGATORIDAE in North America would be a conceivable counter-argument, but surely this will never be the case !

## ANNEXE 3

Der Holotypus von "*Crocodilus mississippiensis*" Daudin [1801–1802], ist der Lectotypus von "*Crocodilus lucius*" Cuvier (G.), 1807.

Von ROBERT MERTENS

Es liegt meist im Interesse der Stabilität und Eindeutigkeit der zoologischen Namen, wenn die Synonyma nicht subjektiv, sondern objektiv sind: d.h. wenn sie bei den Genera die gleichen Species als Genotypen, bei Species die gleichen Stücke als Specietypen haben. Aus Gründen, welche die Internationale Kommission der Zoologischen Nomenklatur dargelegt hat, halte ich es für sehr erwünscht, wenn der Genotypus von *Alligator* Cuvier, 1807 (*Ann. Mus. Hist. nat.*, Paris 10 : 25), nämlich *Crocodilus lucius* Cuvier (l. c. : 28), der bisher als ein subjektives Synonym von *Crocodilus mississippiensis* Daudin [1801–1802] (*Hist. nat. gén. partic. Rept.* 2 : 412, 1801) galt, zu einem objektiven Synonym des letzteren wird.

Das ist durch die Wahl des Typus von *lucius* ohne weiteres möglich. Daudin hat seinen *Crocodilus mississippiensis* auf ein einzelnes Stück des Musée d'Histoire Naturelle in Paris begründet, das der Botaniker Michaux von den Ufern des Mississippi [sic] mitgebracht hat. Somit ist dieses Stück, das sich nach brieflicher Mitteilung von Dr. Jean Guibé an Mr. Hemming im Pariser Museum\* befindet, der Holotypus von *mississippiensis*. Dieses Stück war bereits Cuvier (1801, Wiedemann's *Arch. Zool. Zoot.* 2 : 170) bekannt. Es wird von Cuvier später (1807) auch bei der Beschreibung seines *lucius* erwähnt, und zwar an erster Stelle; es kann kein Zweifel darüber sein, dass es bei der Beschreibung von *lucius* vorlag. Wenn auch Cuvier dabei noch ein weiteres (von Peale eingeschicktes) Stück von *lucius* aufzählt, so erscheint es mir am richtigsten, das Michaux'sche Stück, d.h. den Holotypus von *mississippiensis*, auch zum Lectotypus von *lucius* zu bestimmen: dadurch bleibt nämlich der Genotypus von *Alligator* für alle Zeiten eindeutig mit dem allbekannten Namen *mississippiensis* in Verbindung. Diese Festlegung des Lectotypus von *lucius* in dem oben erwähnten Sinne erfolgt auf berechtigten Wunsch von Mr. Hemming.

\* For the letter here referred to by Professor Mertens, see Annexe 2(1).